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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,152	03/07/2006	Robert A. Yapel	59031US003	3408
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ST. PAUL, MN 55133-3427				
EXAMINER				
LAMB, BRENDA A				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
11/27/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com

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Office Action Summary

Application No.

10/595,152

Applicant(s)

YAPPEL, ROBERT A.

Examiner

Brenda A. Lamb

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/6/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 18-23, 29, 30 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17, 24-28, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date 8/18/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Applicant's election of Group II in the reply filed on 8/6/2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms in claim 26 lacks proper antecedent basis: "the forward fastener" and "the rearward fastener".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-12,15,24-25,28 rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al 4,984,533.

Takahashi et al teaches the die coater comprising a first die block, a second die block, and a plurality of fasteners holding the first die block and the second die block together, wherein: (a) each of the plurality of fasteners provides a compression force between the first die block and the second die block; (b) the first die block and the second die block are constructed to provide an internal manifold and a coating slot; and (c) fasteners are arranged so that some are rearward fasteners and some are forward fasteners, the forward fasteners being closer to the coating slot of the die than the rearward fasteners, said die coater characterized in that at least two of said fasteners, one rearward fastener and the forward fastener nearest said rearward fastener. The rearward fasteners (11a) and forward fasteners (10a) in the Takahashi et al die coater are capable of being tightened such that they have a torque differential within the scope of the claims via a known tightening means for fastening bolts, especially, in the case if one desires a narrow slot width, since the teachings of Takahashi et al disclose that fasteners 10a act as a fulcrum and do not need to be firmly fixed or tightened whereas

fasteners 11a can act to decrease slot width and need to firmly fixed or tightened thereby exhibiting a greater a torque differential within the scope of claims 10 and 15 in order to provide a narrow slot width. With respect to claims 12, 24 and 28, Takahashi et al shows the die coater includes an offset bracket 8 having structure within the scope of the claim. Further, with respect to claim 24 and 28, the same rejection applied to claim 12 is applied here. Further, Takahashi et al teaches the offset bracket 8 places compression force between the first die block and second die block (see column 3 lines 18-65). With respect to claim 11, Takahashi et al shows the relationship of the forward row and rearward fasteners to a desired area of the internal manifold and the die back surface. With respect to claim 25, the fasteners extend through the Takahashi et al die coater in the manner set forth in the claim. With respect to claim 26, the rearward fasteners (11a) and forward fasteners (10a) in the Takahashi et al die coater are capable of being tightened such that they have a torque differential within the scope of the claims via a known tightening means for fastening bolts.

Claims 13-14, 16-17, 26-27 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al.

Takahashi et al is applied for the reasons noted above but fails to teach the height uniformity of the coating slot is within the scope of the claims. However, it would have been obvious to modify Takahashi et al coater die to adjust using fasteners 11a which adjust the height or width of the coating slot such that such the height uniformity of the coating slot is within the scope of the claims for the obvious reason to increase the uniformity of coating applied to the substrate. Thus claims 13-14 and 27 are obvious

over the above cited reference. With respect to claims 16-17, it would have been an obvious matter of design choice to provide the Takahashi et al coater die with an overhang within the scope of the claim and ratio of the overhang to thickness of the first die block is within the scope of the claim since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). With respect to claim 26, the rearward fasteners (11a) and forward fasteners (10a) in the Takahashi et al die coater are capable of being tightened such that they have a torque differential within the scope of the claims via a known tightening means for fastening bolts. With respect to claim 31, the same rejection to claims 16-17 are applied here. Further, with respect to claim 32, it would have been obvious given the modifications of the Takahashi et al die coater to construct the first die block from stainless steel having a modulus of elasticity is within the scope of claim 32 for the known advantage of stainless steel – improved corrosion resistance.

Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyrner 3,241,183.

Tyrner teaches the design of a die coater comprising a first die block, a second die block, and a plurality of fasteners holding the first die block and the second die block together, wherein: (a) each of the plurality of fasteners provides a compression force between the first die block and the second die block; (b) the first die block and the second die block are constructed to provide an internal manifold and a coating slot; (c) the die coater has an overhang On, defined as the linear distance along the first die

block surface facing the coating slot of the die from the rear of the die manifold to the leading edge of the die slot, and (d) a cube of the ratio of overhang to thickness of the first die block of less than about 9. Tryner fails to teach that the overhang of the die coater is less than about 119 mm. However, it would have been an obvious matter of design choice to provide the Takahashi et al coater die with an overhang within the scope of the claim since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Thus claim 31 is obvious over Tryner. With respect to claim 31, Tryner teaches that the first die block is constructed from steel but fails to teach the modulus of elasticity is within the scope of claim 32. However, it would have been obvious to stainless steel as the steel in the Tryner die coater for the known advantage of stainless steel – improved corrosion resistance especially since stainless steel has a modulus of elasticity is within the scope of claim 32.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Wednesday-Friday. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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